

WE CLAIM:

1. A bracket system for operatively connecting upper and lower horizontal support members and distal and proximal vertical support members to form a gate assembly adapted to be connected to a structural member, the bracket system comprising:

a first distal brace member comprising a fixedly positioned section and an adjustably positioned section defining a first support surface and a second support surface, where the first support surface extends substantially perpendicularly to the second support surface, the first support surface is adapted to be connected to the distal vertical support member, and the second support surface is adapted to be connected to the distal vertical support member; and

a second distal brace member comprising a fixedly positioned section and an adjustably positioned section defining a third support surface and a fourth support surface, where the third support surface extends substantially perpendicularly to the fourth support surface, the third support surface is adapted to be connected to the distal vertical support member; and

a first brace assembly comprising a first proximal brace member comprising a fixedly positioned section and an adjustably positioned section defining a fifth support surface extends substantially perpendicularly to the sixth support surface, the fifth support surface is adapted to be connected to the upper horizontal support member, the sixth support surface is adapted to be connected to the proximal vertical support member, and the first hinge assembly is adapted to be connected to the structural member; and

a second brace assembly comprising a second proximal brace member comprising a fixedly positioned section and an adjustably positioned section defining a seventh support surface and an eighth support surface and a second hinge assembly rigidly connected to the second proximal brace member, where the seventh support surface extends substantially perpendicularly to the eighth support surface, the seventh support surface is adapted to be connected to the

lower horizontal member, the eighth support surface is adapted to be connected to the proximal vertical support member, and the second hinge assembly is adapted to be connected to the structural member; whereby

5 the first distal brace member, the second distal brace member, the first proximal brace member, and the second proximal brace member are movable relative to each other; and

spatial relationships among the first distal brace member, the second distal brace member, the first proximal brace member, and the second proximal brace member are fixed only when the gate assembly is formed.

10 2. A bracket system as recited in claim 1, in which:

the first hinge assembly is rigidly connected to the adjustably positioned section of the first proximal brace member adjacent to the fifth support surface; and

15 the second hinge assembly is rigidly connected to the adjustably positioned section of the second proximal brace member adjacent to the seventh support surface.

3. A bracket system as recited in claim 1, in which the first hinge assembly defines a first hinge axis, the second hinge assembly defines a second hinge axis, and the first and second hinge axes are aligned when the gate assembly is
20 formed.

4. A bracket assembly as recited in claim 1, in which:

the first and second distal brace members each comprise a horizontal portion and a vertical portion, where the horizontal portion of the first distal brace member defines the first support surface;

25 the vertical portion of the first distal brace member defines the second support surface;

the horizontal portion of the second distal brace member defines the third support surface; and

the vertical portion of the second distal brace member defines the fourth support surface.

5. A bracket assembly as recited in claim 1, in which:

the first and second proximal brace members each comprise a horizontal portion and a vertical portion, where

the horizontal portion of the first proximal brace member defines the fifth support surface;

the vertical portion of the first proximal brace member defines the sixth support surface;

the horizontal portion of the second proximal brace member defines the seventh support surface; and

the vertical portion of the second proximal brace member defines the eighth support surface.

6. A bracket assembly as recited in claim 4, in which the first and second distal brace members each further comprise a brace portion arranged between the horizontal and vertical portions.

7. A bracket assembly as recited in claim 5, in which the first and second proximal brace members each further comprise a brace portion arranged between the horizontal and vertical portions.

8. A bracket assembly as recited in claim 1, in which a plurality of fastening holes are formed in the brace members to facilitate connection of the brace members to the support members.

9. A bracket assembly as recited in claim 1, in which the first and second distal brace members comprise a fixedly positioned section and an adjustably positioned section connectedly slidable relative to one another along a horizontal axis.

10. A bracket assembly as recited in claim 1, in which the first and second proximal brace members comprise a fixedly positioned section and an adjustably positioned section connectedly slidable relative to one another along a horizontal axis.

5 11. A method of forming a gate assembly to be connected to a structural member, the method comprising the steps of

providing a first distal brace member comprising a fixedly positioned section and an adjustably positioned section defining a first support surface and a second support surface, where the first support surface extends substantially perpendicularly to the second support surface;

10 providing a second distal brace member comprising a fixedly positioned section and an adjustably positioned section defining a third support surface and a fourth support surface, where the third support surface extends substantially perpendicularly to the fourth support surface;

15 providing a first brace assembly comprising a first proximal brace member comprising a fixedly positioned section and an adjustably positioned section defining a fifth support surface and a sixth support surface, where the fifth support surface extends substantially perpendicularly to the sixth support surface;

20 providing a first hinge assembly adapted to be connected to the structural member;

rigidly connecting the first hinge assembly to the adjustably positioned section of the first proximal brace member;

25 providing a second brace assembly comprising a second proximal brace member comprising a fixedly positioned section and an adjustably positioned section defining a seventh support surface and an eighth support surface, where the seventh support surface extends substantially perpendicularly to the eighth support surface;

30 providing a second hinge assembly adapted to be connected to the structural member;

rigidly connecting the second hinge assembly to the adjustably positioned section of the second proximal brace member;

slidably positioning the adjustably positioned section relative to the fixedly positioned section of the first and second distal brace members and of the first and second proximal brace members; and

rigidly connecting horizontal and vertical support members to said first and second distal brace members and to said first and second brace assemblies.

12. A method as recited in claim 11, further comprising the step of forming a plurality of fastening holes in the brace members to facilitate connection of the brace members to the support members.

13. A bracket system for reinforcing a gate assembly, the bracket system comprising:

a first distal brace member having a fixedly positioned section and an adjustably positioned section comprising a first horizontal support portion defining a first support surface, a first vertical support portion defining a second support surface, and a first brace portion arranged between the first horizontal support portion and the first vertical support portion, where the first support surface extends substantially perpendicularly to the second support surface, the first support surface lies in an upper horizontal support plane, and the second support surface lies in a distal vertical support plane; and

a second distal brace member having a fixedly positioned section and an adjustably positioned section comprising a second horizontal support portion defining a third support surface, a second vertical support portion defining a fourth support surface, and a second brace portion arranged between the second horizontal support portion and the second vertical support portion, where the third support surface extends substantially perpendicularly to the fourth support surface, the third support surface lies in a lower horizontal support plane, and the fourth support surface lies in the distal vertical support plane; and

a first brace assembly comprising a first proximal brace member having a fixedly positioned section and an adjustably positioned section comprising a third horizontal support portion defining a fifth support surface, a third vertical support portion defining a sixth support surface, and a third brace portion arranged between the third horizontal support portion and the third vertical support portion, and

a first hinge assembly rigidly connected to the third horizontal support portion of the first proximal brace member, where the fifth support surface extends substantially perpendicularly to the sixth support surface, the fifth support surface lies in the upper horizontal support plane, the sixth support surface lies in a proximal vertical support plane, and the first hinge assembly is adapted to be connected to the structural member; and

a second brace assembly comprising a second proximal brace member having a fixedly positioned section and an adjustably positioned section comprising a fourth horizontal support portion defining a seventh support surface, a fourth vertical support portion defining an eighth support surface, and a fourth brace portion arranged between the fourth vertical support portion, and

a second hinge assembly rigidly connected to the fourth horizontal support portion of the second proximal brace member, where the seventh support surface extends substantially perpendicularly to the eighth support surface, the seventh support surface lies in the lower horizontal support plane, the eighth support surface lies in the vertical support plane, and the second hinge assembly is adapted to be connected to the structural member; whereby

the first distal brace member, the second distal brace member, the first proximal brace member, and the second proximal brace member are movable relative to each other; and spatial relationships among the first distal brace member, the second distal brace member, the first proximal brace member, and the second proximal brace member are fixed only when the gate assembly is formed.

14. A bracket system as recited in claim 13, in which the first hinge assembly defines a first hinge axis, the second hinge assembly defines a second hinge axis, and, when the first and second hinge assemblies are connected to the structural member, the first and second hinge axes are aligned.

5 15. A bracket assembly as recited in claim 13, in which a plurality of fastening holes are formed in the brace members to facilitate connection of the brace members to the support members.

10 16. A bracket system for operatively connecting upper and lower support members and distal and proximal support members to form a gate assembly adapted to be connected to a structural member, the bracket system comprising:
a first distal brace member comprising a fixedly positioned section and an adjustably positioned section defining a first support surface and a second support surface; and
a second distal brace member comprising a fixedly positioned section and
15 an adjustably positioned section defining a third support surface and a fourth support surface; and
a first brace assembly comprising a first proximal brace member comprising a fixedly positioned section and an adjustably positioned section defining a fifth support surface and a sixth support surface and a first hinge
20 assembly rigidly connected to the first proximal brace member, where
the first hinge assembly is adapted to be connected to the structural member; and
a second brace assembly comprising a second proximal brace member comprising a fixedly positioned section and an adjustably positioned section
25 defining a seventh support surface and an eighth support surface and a second hinge assembly rigidly connected to the second proximal brace member, where
the second hinge assembly is adapted to be connected to the structural member; whereby

the first distal brace member, the second distal brace member, the first proximal brace member, and the second proximal brace member are movable relative to each other; and

5 spatial relationships among the first distal brace member, the second distal brace member, the first proximal brace member, and the second proximal brace member are fixed only when the gate assembly is formed.

10 17. A bracket assembly as recited in claim 16, in which a plurality of fastening holes are formed in the brace members to facilitate formation of the gate assembly.